

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

ADVANCED FLUID SYSTEMS, INC.,	:	CIVIL ACTION NO. 1:13-CV-3087
	:	
Plaintiff	:	(Chief Judge Conner)
	:	
v.	:	
	:	
KEVIN HUBER, INSYSMA	:	
(INTEGRATED SYSTEMS AND	:	
MACHINERY, LLC), LIVINGSTON &	:	
HAVEN, LLC, CLIFTON B. VANN IV,	:	
and THOMAS AUFIERO,	:	
	:	
Defendants	:	

MEMORANDUM

Plaintiff Advanced Fluid Systems, Inc. (“AFS”) brings this action against a former employee and several competitors asserting claims for misappropriation of trade secrets, breach of fiduciary duty, and aiding and abetting said breach. AFS moves for judgment pursuant to Federal Rule of Civil Procedure 56 on each of its claims. (Doc. 156). Also before the court are cross-motions for summary judgment filed by defendants Integrated Systems and Machinery, LLC, Livingston & Haven, LLC, Clifton B. Vann IV, and Thomas Aufiero. (Docs. 171, 175).

I. Factual Background & Procedural History¹

AFS is a Pennsylvania corporation that distributes, manufactures, and installs hydraulic components for engineering projects. (Doc. 165 ¶ 2). Defendant Kevin Huber (“Huber”) was employed at AFS as a full-time sales engineer between November 2006 and October 2012. (Doc. 169 ¶ 2). Huber left his position at AFS after incorporating his own firm, Integrated Systems and Machinery, LLC (“Integrated Systems”), in October 2012. (Id. ¶¶ 5, 181). This litigation arises from events circumambient to Huber’s departure.

A. The 2009 Contract

In September 2009, AFS entered into a three-year contract with the Virginia Commonwealth Space Flight Authority (“the Authority”) to build and maintain equipment for the NASA rocket launch facility on Wallops Island, Virginia. (Id. ¶ 6). AFS designed, engineered, and installed a hydraulic and control launch system for the Authority at Wallops Island. (See id. ¶¶ 6-7, 9). The system, referred to as the

¹ Local Rule 56.1 requires that a motion for summary judgment pursuant to Federal Rule of Civil Procedure 56 be supported “by a separate, short, and concise statement of the material facts, in numbered paragraphs, as to which the moving party contends there is no genuine issue to be tried.” LOCAL RULE OF COURT 56.1. A party opposing a motion for summary judgment must file a separate statement of material facts, responding to the numbered paragraphs set forth in the moving party’s statement and identifying genuine issues for trial. See id. Unless otherwise noted, the factual background herein derives from the parties’ Rule 56.1 statements of material facts. (See Docs. 165, 169, 178, 193, 194, 205, 207, 211). To the extent the parties’ statements are undisputed or supported by uncontroverted record evidence, the court cites directly to the statements of material facts. We note that Huber and Integrated Systems initially lodged numerous objections to AFS’s Rule 56.1 statement on the basis that AFS filed supporting exhibits incorrectly. (See generally Docs. 205, 207). Huber and Integrated Systems withdrew these objections in letters dated September 6, 2016 and September 8, 2016, respectively. (Docs. 213-14).

Teleporter/Erector/Launcher Hydraulic System (“Hydraulic System”), is comprised of many constituent parts, including a component known as the “strongback.” (Id. ¶¶ 6-7). The strongback is the platform that carries rockets in a horizontal position to the launch pad. (Id. ¶ 7). A pair of “gripper arms” secure the rocket against the strongback. (Id. ¶ 111; see, e.g., Doc. 166-15). The Hydraulic System then lifts the rocket and strongback from a horizontal position to a vertical position and holds the rocket in place for launch. (Doc. 169 ¶ 7).

Orbital Sciences Corporation (“Orbital”) launches its Antares rocket from Wallops Island using the Hydraulic System designed and installed by AFS. (Id. ¶ 6). The Antares rocket services and supplies the International Space Station. (See id.) Huber became aware of the Hydraulic System project and introduced AFS’s management team to it through his friend and Orbital engineer Keith Fava (“Fava”). (Id. ¶ 15). Huber was intimately involved with the Hydraulic System project from its inception, and he was the main point of contact between AFS and Orbital. (Id. ¶¶ 16-18). Indeed, Orbital employees considered Huber to be the *de facto* manager of the project. (Id.)

AFS supplied the Authority with a comprehensive package of engineering drawings generated during design and installation of the Hydraulic System. (Id. ¶¶ 12-13). Pursuant to the contract between AFS and the Authority, all materials generated during performance of the agreement are deemed “work for hire” and the “exclusive property” of the Authority. (Doc. 165 ¶ 12). The contract defers to a “Non Disclosure Agreement” for treatment of confidential information, but AFS and the Authority never executed such an agreement. (Id. ¶¶ 10-11). Nonetheless,

the Authority's lead engineers testified that they released AFS's drawings only to those that "needed to know" the information. (Doc. 158-7, Reed and Nash Dep. 85:6-87:5, 88:3-89:25, 90:23-91:2, 92:3-95:15, Mar. 30, 2016 ("Reed/Nash Dep.")).

In September of 2012, the Authority experienced financial difficulty. (Doc. 169 ¶ 109). It sold both the strongback and Hydraulic System to Orbital to provide continued funding for launches at Wallops Island. (Id.) AFS did not execute a non-disclosure agreement with Orbital. (Doc. 165 ¶ 42). Consequently, Orbital considers itself to be the legal owner of AFS's engineering drawings. (Doc. 178 ¶¶ 128-29). This belief notwithstanding, Orbital maintained a practice of only disclosing AFS's drawings on a need-to-know basis. (See Doc. 172-28, Edwards Dep. 90:16-91:12, Mar. 22, 2016 ("Edwards Dep.")).

AFS employs security measures to safeguard its engineering files, including data related to the Hydraulic System. AFS secures its files on a password-protected server at its headquarters in York, Pennsylvania. (Doc. 169 ¶¶ 33-35). Its facility is monitored by security cameras. (Doc. 192-6, Burkhardt Dep. 24:10-23, May 25, 2016 ("Burkhardt Dep.")). To access files on-site, employees must enter individualized usernames and passwords; to access them remotely via virtual private network requires two passwords. (Doc. 169 ¶¶ 33-36). Authority employees and others at Wallops Island have limited access to these materials through a password-protected online repository managed by the Mid-Atlantic Regional Spaceport. (Id. ¶ 37; see Reed/Nash Dep. 79:25-81:21). AFS's finalized engineering drawings bear its name as well as a statement that the drawings are proprietary and confidential. (Doc. 169 ¶¶ 13, 34).

B. Huber's Relationship with the Livingston Defendants

Defendant Thomas Aufiero ("Aufiero") was a sales manager at AFS who worked closely with Huber on the initial Hydraulic System project. (Doc. 178 ¶ 48; see also Doc. 169 ¶ 39). In January 2011, Aufiero left AFS to work as a regional sales manager for defendant Livingston & Haven, LLC ("Livingston"). (Doc. 169 ¶¶ 39-41). Livingston "designs, assembles, and installs hydraulic fluid systems" and generally competes in the same market as AFS. (See Doc. 178 ¶¶ 8-9).

Shortly after Aufiero began working for Livingston, he emailed Huber to request photos of the new Hydraulic System cylinders recently delivered to AFS's headquarters. (Doc. 169 ¶¶ 40-42). Huber emailed the requested photos to Aufiero. (Id. ¶ 41). Ten months later, in November 2011, Huber emailed Aufiero 10 photos and a video showing tests of the Hydraulic System. (Id. ¶¶ 43-44). Soon afterward, Huber requested that he and Aufiero maintain contact using Huber's personal email address. (See id. ¶ 45).

In late 2011 or early 2012, Huber began meeting with a team of Livingston employees at its headquarters in North Carolina. (Id. ¶¶ 46-47). The team consisted of Aufiero, defendant Clifton B. Vann, IV ("Vann"), president of Livingston, and Craig Hill ("Hill"), a Livingston engineer. (Id.) Huber met and communicated with this group on several occasions to discuss Orbital's needs regarding support work for and eventual upgrades to the Hydraulic System. (See id. ¶¶ 53, 56, 71, 95-96, 129, 143, 178). Huber conveyed to the Livingston team that Orbital was unhappy with AFS's services and that it was seeking new vendors to service the Hydraulic System. (Doc. 178 ¶¶ 43-50).

All told, Huber participated in 338 calls with Livingston employees on his AFS-issued cellular phone. (Doc. 169 ¶ 52). He also communicated electronically with the Livingston team. During a January 8, 2012 meeting, Livingston established an account for Huber with Dropbox.com, an online document-sharing service, and linked Huber's account with Hill's and Aufiero's Dropbox accounts. (Id. ¶¶ 53-55). A Livingston employee installed a virtual private network on Huber's AFS-issued laptop computer, allowing Huber to access Livingston's private network and AFS's private network on the same device. (Id. ¶¶ 57-58). The Livingston defendants also issued Huber a company email address. (Id. ¶ 59). By January 11, 2012, Huber's email signature on his Livingston account listed him as Livingston's "Program Manager." (Id. ¶ 60).

C. Huber's Departure from AFS

Huber took affirmative steps to help the Livingston employees familiarize themselves with the Hydraulic System and Orbital's operations on Wallops Island after his first meeting at Livingston headquarters. For example, on March 6, 2012, Huber requested a list of Hydraulic System component parts from Dan Vaughn, AFS's vice president and engineering manager. (Id. ¶¶ 61-62). Huber emailed the list, along with attendant prices and profit margins, to Aufiero. (Id. ¶¶ 64-65). He also arranged a tour of Wallops Island for Aufiero, Vann, and Hill on March 21, 2012. (Id. ¶¶ 67-71). Huber showed the Livingston employees a rocket assembly room, a launch pad, and the Hydraulic System. (Id. ¶¶ 73-74).

After the March 2012 tour, Huber continued to provide information about the Hydraulic System to Aufiero, Vann, and Hill via Dropbox and email. (See id. ¶ 75).

Huber created a new folder on Dropbox labeled “Orbital Sciences” and shared it with Aufiero. (Id. ¶¶ 85-91). The folder contained numerous files including the Hydraulic System cylinder assembly and arrangement drawings, a “majority” of the hydraulic schematics for the system, and AFS’s pricing and billing information. (Id.) Huber later emailed Hill documents containing specifications the Authority provided to AFS in their original contract for the Hydraulic System. (Id. ¶ 94).

Huber’s discussions with the Livingston team continued after Huber turned over AFS’s engineering files. Huber expressed frustration to Livingston that AFS was ostensibly contemplating an end to its service work on the Hydraulic System. (See Doc. 178 ¶¶ 50-51). Huber also indicated that Orbital was “nervous about not having a supplier” for necessary parts. (Id. ¶ 51). Consequently, Huber arranged another meeting between the Livingston defendants and Fava for April 12, 2012 to engage in “high level” discussions about the Hydraulic System. (Doc. 169 ¶¶ 95-97).

Fava explained during the April 12 meeting that Orbital wanted to upgrade the Hydraulic System cylinder assembly. (Id.) He told Huber, Aufiero, Vann, and Hill that Orbital would either install a new cylinder system at the launch pad or modify the cylinders it already owned. (Id.) Fava noted Orbital would announce a competitive bidding process for the new contract. (Id.) In his meeting notes, Fava remarked that Livingston might have a “leg up” on the competition if it retained Huber. (Id. ¶ 96). He observed that AFS’s “management doesn’t support us or their own employees in the type of team atmosphere that we need on an R&D program like this.” (Id.)

Huber, Vann, and Aufiero began discussing Livingston's prospective role in the anticipated upgrades after the meeting with Fava. (See id. ¶¶ 101-04). Huber advised Orbital that if it selected Livingston to complete the cylinder upgrades, Livingston would likely hire Huber as project manager. (See id. ¶ 103). He also discussed compensation with Vann and Aufiero. (Id. ¶ 104). Huber remained an employee at AFS for several months after having these discussions. (See id. ¶ 190). Eventually, Huber resigned from AFS in October of 2012. (See id. ¶¶ 187, 190). On October 18, 2012, eight days before his last day at AFS, Huber incorporated his own firm, Integrated Systems, with the Nevada Secretary of State. (Id. ¶¶ 181, 190).

D. The Hydraulic System Upgrade Contracts

Orbital issued two contracts for work relating to Hydraulic System upgrades after competitive bidding periods. Orbital granted one contract to Livingston for replacement of the system's strongback gripper arms in December of 2012. (Id. ¶ 138). In March of 2013, Orbital granted a second contract to Integrated Systems for manufacture of a new cylinder assembly. (Id. ¶ 254). Because AFS's claims implicate actions taken during these contracts' bidding periods, we recount the details of each *in extenso*.

1. The Gripper Arms Contract

Orbital's first upgrade concerned the Hydraulic System's gripper arms. Orbital decided to replace the gripper arms in the spring of 2012. (Id. ¶ 112). Fava contacted Huber at his AFS email address to provide design specifications for the project. (Id. ¶ 113). Fava indicated that the new gripper arms "would be designed and installed by AFS." (Id.) Huber emailed AFS engineers on June 19, 2012 and

requested “technical recommendations” for the gripper arms upgrade. (Id. ¶ 117). At the same time, he continued discussions about the upgrade with his Livingston contacts. (Id. ¶ 118).

Orbital separately approached Livingston about the gripper arms upgrade. Michael Brainard (“Brainard”), an Orbital engineer, expressed interest in meeting with Livingston management to discuss details of the gripper arms proposal. (See Doc. 178 ¶¶ 60-62). Brainard surmised that Orbital could share information about AFS’s prior work on the gripper arms upon belief that Orbital “own[ed] the rights to share that information.” (Id. ¶¶ 62-63). Fava contacted Aufiero and Hill to secure a non-disclosure agreement from Livingston so that Orbital could share information concerning its upgrade plans. (Doc. 172-23, Brainard Dep. 84:8-85:18, Apr. 12, 2016). Livingston executed the non-disclosure agreement on May 15, 2012. (Doc. 178 ¶ 60).

Orbital’s policy is to solicit bids from vendors that Orbital deems qualified to perform the work. (Doc. 169 ¶ 110). Orbital does not accept unsolicited bids. (See id.) Rather, it invites prospective vendors to the bidding process by sending them a request for quote. (Id.) Companies interested in bidding must then submit a rough order of magnitude (“rough order”) for Orbital’s review. (Id.) Existing vendors will typically receive a quote request for future contracts. (Id.)

Orbital requested quotes from both AFS and Livingston for the gripper arms contract. (See id. ¶¶ 113-14). On August 10, 2012, Huber submitted a rough order on behalf of AFS totaling \$277,000. (Id. ¶ 119). One month later, the Livingston team submitted a firm fixed price of \$320,500. (Id. ¶ 120). Livingston’s firm price included compensation for Huber. (Id. ¶¶ 130-31). In contemporaneous notes dated

September 5 and 10, 2012, Fava observed that the decision will “likely come down to price, with a slight nudge towards AFS due to their experience with the current system.” (Id. ¶ 133).

AFS authorized Huber to submit a final price of \$277,828.80 on September 12, 2012. (Id. ¶ 122). Notwithstanding this final quote duly authorized by AFS management, on September 17, 2012, Huber submitted a firm price on behalf of AFS for \$410,383. (Id. ¶¶ 123-24). Huber did not consult AFS management before presenting the inflated price to Orbital. (Id. ¶ 124). He specifically asked a new AFS sales manager not to mention the bid, noting that he “went extremely high on the quote for a reason.” (Id.)

Orbital awarded the gripper arms contract to Livingston on September 24, 2012. (Id. ¶¶ 133-35). Orbital based its decision, in part, on the price differential between Livingston’s and AFS’s bids. (Id.) Fava cited AFS’s quote and its track record of poor customer service as Orbital’s reasons for deciding against AFS for the contract. (Doc. 178 ¶ 77). Livingston and Orbital eventually finalized a price of \$285,685. (Doc. 169 ¶ 138). Huber received \$41,322.15 from Livingston after the latter received the gripper arms contract. (Id. ¶ 132).²

² During discovery, AFS found its gripper arms firm price quote on Livingston’s corporate server. (Doc. 169 ¶ 125). “Craig Hill” was identified as the document’s custodian. (Id.) AFS also discovered copies of its firm price quote on Huber’s Dropbox account located in a folder labeled “Craig.” (Id. ¶ 126). Aufiero had explicitly advised Huber against sharing AFS’s pricing information with Livingston staff while he remained an AFS employee. (Doc. 178 ¶¶ 74-75).

2. *The Cylinder Upgrade Contract*

In addition to replacing the gripper arms, Orbital decided to upgrade the system's hydraulic cylinder assembly. (Id. ¶ 140). With this upgrade, the Hydraulic System would ostensibly support a heavier rocket and send a heavier "payload" to the International Space Station. (Id.) Orbital determined that it could obtain this result one of two ways: (1) by replacing its cylinders' component parts but not the cylinders themselves, or (2) by installing completely new cylinders and cylinder assemblies. (Id. ¶ 141).

Huber, Aufiero, Vann, and Hill knew of Orbital's planned cylinder upgrade by March 2012. (Id. ¶ 143). After learning about Orbital's plan, Huber disclosed to Aufiero the prices AFS paid for the original hydraulic cylinders and all component parts. (Id. ¶ 149). Orbital requested a quote from Livingston for the construction of new cylinders on July 10, 2012. (Id. ¶ 153). Orbital sent a similar request to Huber to forward to AFS, specifically inquiring as to the cost of modifying and reusing the existing cylinders in lieu of manufacturing new ones. (Id. ¶¶ 153, 157-58). Huber did not deliver this request to AFS. (Id. ¶ 155).

AFS's engineering team, unaware of Orbital's request to quote both alternatives, tasked Huber to begin developing a quote for upgrading the existing cylinders. (See id. ¶ 159). The team also instructed Huber to obtain a formal quote request from Orbital. (Id.) AFS's engineers thereafter determined that cylinder modification would not safely accomplish Orbital's goal of increasing load capacity. (Id. ¶ 161). The engineers were also concerned that Orbital's desired three-month

modification turnaround was not feasible. (Id.) Huber never informed AFS's management that Orbital also requested a quote for new cylinders. (Id. ¶ 155).

On September 5, 2012, Huber provided a request for quotation to AFS for cylinder modification only and proposed a feasibility study to determine whether AFS could safely modify the existing cylinders. (Id. ¶¶ 164-65). Huber estimated the cost of the study to be between \$15,000 and \$25,000. (Id. ¶ 166). When Huber proposed the study to Orbital on September 6, Brainard responded that AFS must first provide a rough order. (Id. ¶ 167). That same day, Huber encouraged AFS to abandon the upgrade bid, stating that he did not "think this project is good business for AFS at this time." (Id. ¶ 168). In an email five days later, Huber told Fava that Orbital should not use AFS for its cylinder upgrade and that Huber would "jump ship" if Orbital chose another vendor. (Id. ¶ 170). Fava understood the alternative vendor to mean Livingston. (Id. ¶ 171). Shortly thereafter, Orbital stopped seriously considering AFS for the cylinder contract. (See id. ¶ 177).

On September 27, 2012, Huber met with Aufiero and Hill to prepare a joint rough order proposal on Livingston's behalf. (Id. ¶¶ 178-80). Large sections of Livingston's proposal were copied verbatim from the rough order AFS submitted for the original cylinder contract. (Id. ¶ 178). Livingston's rough order totaled \$2,338,322. (Id.) Huber, Aufiero, Vann, and Hill set pricing to align with the costs that AFS incurred when it installed the original cylinders. (See id. ¶ 231).

On October 8 and 9, 2012, as Livingston worked on its rough order for the cylinder contract, Huber used his AFS laptop and an external hard drive to download approximately 98 gigabytes of data from AFS's servers. (Id. ¶¶ 182-85).

Huber downloaded materials pertaining to the Hydraulic System as well as files related to AFS's other projects. (Id.; Doc. 158-6, Huber Dep. 265:1-266:10, Feb. 10, 2016 ("Huber Dep.")). On the morning of October 9, 2012, Huber submitted his resignation to AFS. (Doc. 169 ¶ 187). His resignation became final on October 26, 2012. (Id. ¶ 190).

In the days following his resignation notice, Huber transferred many of the downloaded files to Livingston using Dropbox and his personal email address. (Id. ¶ 194). Huber began transmitting the files on October 15, 2012, nearly two weeks before his resignation took effect. (Id.) The shared information included weld history details, weld maps, tubing drawings, a spreadsheet of component parts, prices for the original gimbals, and AFS's "as built" drawings. (See id. ¶¶ 196-99, 202-04, 206-17). On October 29, 2012, Huber shared drawings generated by AFS for both the new cylinders and the new gripper arms.³ (Id. ¶¶ 218-21). Huber altered many of these documents, postdating them and identifying himself and Integrated Systems as the author. (Id. ¶¶ 203-04, 207-08, 220). The documents' substantive content was unchanged. (Id. ¶¶ 196-99, 202-04, 206-08, 218-21, 220).

Livingston submitted its rough order to Orbital, with pricing for both cylinder upgrade alternatives, on November 2, 2012. (Id. ¶ 229). Two months later, Integrated Systems surprised the Livingston team by submitting its own bid for the cylinder contract. (See id. ¶ 243). Like Livingston, Integrated Systems quoted both upgrade alternatives. (Id.) Huber never informed Livingston that he intended to

³ After reviewing these drawings, Livingston engineers adjusted their gripper arms design to "incorporate[] features" of AFS's proposal. (Id. ¶¶ 224-25).

bid on the cylinder contract. (Doc. 178 ¶ 100). Integrated Systems' bid explicitly cited drawings that Huber downloaded from AFS's servers as justification for its price quote. (Doc. 169 ¶ 243).

Orbital tentatively awarded the cylinder contract to Integrated Systems on March 13, 2013 for \$2,028,966. (Id. ¶ 246). Fava catalogued the potential risks and benefits of using Integrated Systems for the contract in several internal documents. Some of these risks included a lack of proper certification, Integrated Systems' dearth of other contracts, and its relative inexperience in handling procurements. (Id. ¶ 247). In support of the selection, Fava cited Orbital's frustration with AFS's customer service and management capabilities. (Id. ¶ 249). Fava observed that although the Hydraulic System "does what it's supposed to do," the Antares rocket suffered problems on "almost every . . . launch." (Doc. 178 ¶ 20). Fava explained that he valued Huber's customer service skills and appreciated his prior experience with Orbital and NASA. (Doc. 169 ¶ 249). Orbital confirmed its decision to award the contract to Integrated Systems upon receiving its best and final offer. (Id. ¶ 254). The parties agreed to a contract price of \$2,028,966. (Id.)

Integrated Systems began work on the contract and obtained the new cylinders in 2014. (See id. ¶ 259). Thereafter, in a separate lawsuit, Orbital accused Huber and Integrated Systems of obtaining the cylinder contract by fraud and concealment. (See id. ¶¶ 265-66). Brainard testified that Orbital would not have awarded the cylinder contract to Integrated Systems had it known Huber developed the bid using AFS's engineering files. (Id. ¶ 270).

AFS eventually subpoenaed Dropbox for access to accounts that Huber opened using his personal and business email addresses. (Id. ¶ 272). Dropbox reported that an account associated with Huber's personal email address contained 29 gigabytes of data. (Id. ¶ 273). Counsel for Huber, Integrated Systems, and AFS agreed to the hiring of a forensic computing expert to examine the Dropbox account linked to Huber's personal email address. (Id. ¶ 274). The analysis revealed that an unknown Dropbox user had attempted to delete files in Huber's Dropbox after AFS served its subpoena. (Id. ¶ 275). Dropbox restored the files, after which the parties documented the account's contents. (Id. ¶¶ 276-77). The deleted files included, *inter alia*, AFS's schematic for the new gripper arms, Huber's letter to Orbital submitting the inflated gripper arms quote without AFS's permission, and his consulting contract with Livingston for the gripper arms work. (Id. ¶ 277).

E. The Instant Proceedings

AFS commenced this action on December 24, 2013. (Doc. 1). In its original complaint, AFS named Huber, Integrated Systems, Livingston, Vann, Aufiero, and Orbital as defendants. (Id.) AFS alleged misappropriation, tortious interference with contract and prospective contractual relations, unjust enrichment, common-law unfair competition, conversion, common-law conspiracy, and Computer Fraud and Abuse Act claims against all defendants, and raised Lanham Act claims against all defendants except Orbital. (Id. at 28-34). AFS also charged Huber with breach of the fiduciary duty of loyalty and the other defendants with aiding and abetting Huber's breach. (Id. at 34-35). Following Rule 12 motion practice, we dismissed AFS's claims under the Computer Fraud and Abuse Act against all defendants, its

Lanham Act claims against the Livingston defendants, and its tortious interference claims pertaining to projects other than the launch system upgrades. (Docs. 66, 70).

AFS filed its second amended complaint on July 7, 2014.⁴ (Doc. 70).

Thereafter, Integrated Systems filed an answer with two counterclaims against AFS, alleging tortious interference with contract and prospective contractual relations, and unfair competition. (Doc. 77 at 37-39). On October 20, 2014, AFS moved for partial summary judgment on its affirmative claims against Huber, Integrated Systems, and the Livingston defendants. (Doc. 81). The court denied the motion without prejudice as premature. (See Doc. 134). With leave of court, counsel for Huber and Integrated Systems withdrew their appearances. (Docs. 140-41). New counsel entered an appearance on behalf of Integrated Systems, (Doc. 146), but Huber remains *pro se*. (Doc. 145).

AFS now moves for partial summary judgment on its affirmative claims for misappropriation of trade secrets, breach of fiduciary duty, and aiding and abetting said breach. (Docs. 156, 159). Integrated Systems and the Livingston defendants

⁴ AFS voluntarily dismissed Orbital from the instant proceedings on May 21, 2014. (Doc. 57). With the court's leave, AFS reasserted its tortious interference claims pertaining to public works projects in New York and New Jersey and certain of its claims under the Computer Fraud and Abuse Act. (Doc. 70). AFS abandoned its Lanham Act claim against the Livingston defendants. (See id.)

filed cross-motions (Docs. 171, 175) for summary judgment on AFS's affirmative claims.⁵ The parties' motions are fully briefed and ripe for disposition.

II. Legal Standard

Through summary adjudication, the court may dispose of those claims that do not present a "genuine dispute as to any material fact" and for which a jury trial would be an empty and unnecessary formality. FED. R. CIV. P. 56(a). The burden of proof tasks the non-moving party to come forth with "affirmative evidence, beyond the allegations of the pleadings," in support of its right to relief. Pappas v. City of Lebanon, 331 F. Supp. 2d 311, 315 (M.D. Pa. 2004); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322-23 (1986). This evidence must be adequate, as a matter of law, to sustain a judgment in favor of the non-moving party on the claims. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250-57 (1986); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587-89 (1986). Only if this threshold is met may the cause of action proceed. See Pappas, 331 F. Supp. 2d at 315.

Courts are permitted to resolve cross-motions for summary judgment concurrently. See Lawrence v. City of Phila., 527 F.3d 299, 310 (3d Cir. 2008); see also Johnson v. Fed. Express Corp., 996 F. Supp. 2d 302, 312 (M.D. Pa. 2014); 10A CHARLES ALAN WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE § 2720 (3d ed.

⁵ AFS's second amended complaint asserts 10 claims in total. AFS has since represented that it will pursue only those claims enumerated in its instant motion. (Doc. 163 at 2-3; Doc. 191 at 45). Accordingly, AFS's other claims are deemed withdrawn. Integrated Systems' cross-motion (Doc. 171) for summary judgment will be denied as moot to the extent it concerns AFS's abandoned claims for civil conspiracy and conversion. The parties also report that AFS's motion (Doc. 159) for summary judgment on Integrated Systems' counterclaims is unopposed. (Doc. 218). The court will thus grant AFS's motion on Integrated Systems' counterclaims.

2015). When doing so, the court is bound to view the evidence in the light most favorable to the non-moving party with respect to each motion. FED. R. CIV. P. 56; Lawrence, 527 F.3d at 310 (quoting Rains v. Cascade Indus., Inc., 402 F.2d 241, 245 (3d Cir. 1968)).

III. Discussion

The instant dispute, distilled to its essence, tasks the court to assess the propriety of Huber's conduct and the complicity *vel non* of Integrated Systems and the Livingston defendants therein. We do so through the prism of AFS's three claims, to wit: a statutory claim for misappropriation of trade secrets against all defendants; a common law claim for breach of the duty of loyalty against Huber; and a common law claim for aiding and abetting Huber's alleged breach against Integrated Systems and the Livingston defendants. The parties' cross-motions test the merit of these claims against a largely unequivocal Rule 56 record.

A. The Pennsylvania Uniform Trade Secrets Act

AFS charges that defendants knowingly misappropriated its trade secrets in violation of the Pennsylvania Uniform Trade Secrets Act ("PUTSA" or "the Act"). See 12 PA. STAT. AND CONS. STAT. ANN. § 5301 *et seq.* Defendants vigorously oppose AFS's claims, asserting: *first*, that AFS does not own the engineering drawings in dispute; *second*, that AFS waived trade secret protection by failing to adequately protect its proprietary information; and *third*, that defendants did not knowingly misappropriate trade secrets.

1. ***Trade Secret Ownership***

Defendants contend that AFS cannot pursue a misappropriation claim because the Authority and not AFS is the legal owner of all materials generated for the Hydraulic System. (Doc. 173 at 15; Doc. 203 at 14; Doc. 204 at 14). The court thoroughly considered and resolved this issue in a prior opinion in this case. See Advanced Fluid Sys. v. Huber, 28 F. Supp. 3d 306 (M.D. Pa. 2014) (Conner, C.J.). Therein, we concluded that “ownership, in the traditional sense, is not prerequisite to” a misappropriation claim. Id. at 323 (citations omitted). We held as a matter of law that AFS need only demonstrate lawful possession of a trade secret to maintain its claim. Id.

The law of the case doctrine forecloses defendants’ renewed entreaty. In the interests of finality and judicial economy, courts are cautioned to “refrain from re-deciding issues that were resolved earlier in the litigation.” Pub. Interest Research Grp. v. Magnesium Elektron, Inc., 123 F.3d 111, 116 (3d Cir. 1997). Absent “extraordinary circumstances,” we will not revisit anew issues of law settled earlier in the case. Id. at 116-17 (quoting Christianson v. Colt Indus. Operating Corp., 486 U.S. 800, 817 (1988)). The Third Circuit Court of Appeals has explained that such circumstances generally arise in only three situations, *viz.*: when (1) new evidence becomes available, (2) supervening law has been announced, or (3) the earlier decision is so clearly erroneous as to effect a manifest injustice. Id.

Defendants cannot satisfy this exacting standard. Their Rule 56 papers recycle the same legal arguments considered (and rejected) at the Rule 12 stage. They cite no new law or new evidence to justify reconsideration of our ruling, nor

do they identify a clear error of law or manifest injustice therein. (See Doc. 173 at 16-17; Doc. 203 at 14-16; Doc. 204 at 14-17). The law of the case doctrine thus bars relitigation of defendants' ownership argument.⁶ To the extent AFS's proprietary materials qualify as trade secrets, its lawful possession of those secrets is sufficient to advance a misappropriation claim.

2. Trade Secret Classification

The PUTSA defines "trade secrets" as information that (1) "[d]erives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use" and (2) "is the subject of efforts that are reasonable under the circumstances to maintain its secrecy." 12 PA. STAT. AND CONS. STAT. ANN. § 5302. The Act expressly includes in its definition of the term such information as formulas, drawings, patterns, compilations (including lists of customers), programs, devices, methods, techniques, and processes. *Id.*

Defendants oppugn AFS's efforts to maintain the secrecy of engineering drawings and other materials generated for the Hydraulic System. Specifically, they assert that AFS's failure to execute confidentiality agreements with Orbital or

⁶ Integrated Systems separately suggests that the law of the case doctrine is inapplicable when the procedural posture actuates a new standard of review. (See Doc. 173 at 17-18). It cites Wiest v. Tyco Electronics Corp., 812 F.3d 319, 330 (3d Cir. 2016), for the proposition that the doctrine does not require courts "to adopt *legal* findings made at the 12(b)(6) stage." (Doc. 173 at 18 (emphasis added)). In Wiest, however, the Third Circuit held only that a finding of sufficient *allegata* to survive Rule 12 scrutiny does not eliminate the requirement of sufficient *probata* to satisfy Rule 56. Wiest, 812 F.3d at 329-30. To the extent Integrated Systems maintains that AFS has not presented sufficient proof of lawful possession, (see Doc. 173 at 19-21; Doc. 219 at 2-3), we disagree. As the discussion *infra* demonstrates, AFS lawfully possessed and benefitted from its proprietary information.

the Authority vitiates any claim to trade secret status. (Doc. 173 at 22-27; Doc. 203 at 17-18; Doc. 204 at 17-21). AFS counters that it undertook extensive, and expensive, efforts to develop and protect its engineering documents. (Doc. 157 at 29-30; Doc. 191 at 5-17).

Pennsylvania courts look to six factors to determine whether information is a protectable trade secret: (1) the extent to which the alleged secret is known outside the business possessing it; (2) the extent to which the alleged secret is known by employees within that business; (3) the extent to which the business took measures to maintain secrecy; (4) the competitive value of the information; (5) the effort or cost of developing or procuring the information; and (6) the relative difficulty of replicating or reverse engineering the information. Bimbo Bakeries USA, Inc. v. Botticella, 613 F.3d 102, 109 (3d Cir. 2010) (citing Crum v. Bridgestone/Firestone N. Am. Tire, LLC, 907 A.2d 578, 585 (Pa. Super. Ct. 2006)). As these factors reveal, the predominant consideration is the existence and preservation of secrecy. See Nova Chems., Inc. v. Sekisui Plastics Co., 579 F.3d 319, 327 & n.12 (3d Cir. 2009) (quoting JAMES POOLEY, TRADE SECRETS § 2.04 (2009)).

We first consider to what extent AFS's alleged trade secrets are known outside of its business. See Bimbo Bakeries, 613 F.3d at 109. It is undisputed that some of AFS's engineering materials are shared with its business partners. AFS provided drawings to Orbital and the Authority, for example, to ensure that all parts of the Hydraulic System interface properly. (See Doc. 169 ¶ 37; Reed/Nash Dep. 79:25-81:21). It disclosed design documents to a third-party contractor who manufactured the system's cylinders. (Doc. 166-18). Notably, AFS did execute a

non-disclosure agreement with this manufacturer. (Doc. 169 ¶ 144). AFS also provides pricing information to customers in the usual course of business. (See, e.g., Doc. 167-7). The record reflects that such disclosures are both essential to AFS's operations and restricted to parties with whom AFS maintains close working relationships.

Huber and Integrated Systems assert that AFS relinquished trade secret protection by divulging its proprietary information to Omega Systems, its third-party data storage provider. (See Doc. 204 at 19; Doc. 206 at 18). Omega Systems merely secures the data on AFS's servers. (See Doc. 192-1 ¶ 31). Pursuant to a contract between Omega Systems and AFS, only a limited number of Omega Systems' employees have access to the encrypted and password-protected files. (See id.; see also Doc. 192-1, Ex. A). The contract also requires that AFS's materials be "kept confidential" in a pass-code protected facility. (Doc. 192-1, Ex. A). We cannot conclude that AFS waived trade secret protection by arranging for encrypted and password-protected backup of its data.

Defendants also assert that sharing engineering materials with the Authority is fatal to AFS's claim. (See Doc. 173 at 24-27; Doc. 177 at 24-25). They contend that, because the Authority is a public entity subject to Virginia's Freedom of Information Act, VA. CODE ANN § 2.2-3700 *et seq.*, AFS's proprietary information has been reduced to public record. (Doc. 173 at 24-27; Doc. 177 at 24-25). The Virginia statute, however, exempts from its mandatory disclosure provision "trade secrets" provided to the Authority by a private entity. VA. CODE ANN § 2.2-3705.6 ¶ 24.b. To qualify for the exemption, entities must submit a written request to the Authority,

identifying the materials for which protection is sought and articulating the reasons for the request. Id. ¶ 24.b(1)-(3). Even when a protective request is granted, the Authority retains “discretion” to disclose the information. Id. § 2.2-3705.6.

AFS marked each of its drawings with a proprietary stamp, (Doc. 169 ¶ 34), but apparently failed to comply with the formal statutory procedure. (See Doc. 191 at 16). This failure notwithstanding, the Authority honored AFS’s proprietary designation and did not disclose its information except as needed for operation of the Hydraulic System. (See Reed/Nash Dep. 85:6-87:5). The Authority’s lead engineers testified that, irrespective of the Authority’s legal right to the engineering drawings, it treated AFS’s proprietary materials as confidential and would not disclose any information without first conferring with AFS. (See id. at 22:9-25, 85:6-87:5, 88:3-89:25, 90:23-91:2, 92:3-95:15).

The record establishes that AFS closely safeguarded its proprietary information. AFS unveiled its engineering documents no more than necessary to support design, installation, maintenance, and operation of the Hydraulic System pursuant to its 2009 contract with the Authority. It shared pricing information only when needed in the ordinary course of customer relationships. The evidence simply does not substantiate defendants’ claim that AFS’s materials are shared so freely as to dilute their competitive value.

The second factor measures the extent to which AFS employees are privy to its confidential information. See Bimbo Bakeries, 613 F.3d at 109. Given the nature of AFS’s work, many of its engineers inevitably require access to at least some of its high-level files. The Hydraulic System is a sophisticated project, and its

design and assembly required thousands of hours of manpower. (Doc. 169 ¶ 215). A team of engineers developed copious engineering drawings which “provide[d] the roadmap for designing and building the [Hydraulic System] cylinder assemblies, cylinder caps, and gimbals.” (Id.) These engineers necessarily possess intricate knowledge of the system’s inner workings.

Rather astonishingly, AFS does not require its engineers (or any of its employees) to execute confidentiality agreements. (See Doc. 193 ¶ 5; Doc. 158-9, Vaughn Dep. 211:14-212:25, May 24, 2016 (“Vaughn Dep.”)). AFS’s vice president and engineering manager testified that he “absolutely” reminds employees orally “not to share confidential information,” but he confirmed that AFS does not maintain a “written policy” concerning confidentiality or non-disclosure. (Vaughn Dep. 211:14-24). Notwithstanding management’s intent to “hire honest people,” employees are not legally bound to keep AFS’s information secret. (Doc. 193 ¶ 5). Failure to impose formal confidentiality obligations on individuals with such broad access to proprietary information resolves this factor against AFS.

The third factor tasks the court to assess AFS’s efforts to maintain secrecy. See Bimbo Bakeries, 613 F.3d at 109. Pennsylvania law requires a holder of trade secrets to use “efforts that are reasonable under the circumstances to maintain . . . secrecy” of its proprietary information. 12 PA. STAT. AND CONS. STAT. ANN. § 5302. “Reasonable efforts” include limiting access to a “need to know basis” and advising employees of the need to protect the information. UNIFORM TRADE SECRETS ACT §

1, cmt.⁷ Importantly, the law does not require trade secret holders to implement “extreme” measures to guard proprietary information against a disloyal employee’s “flagrant industrial espionage.” Id.

Defendants assert that AFS’s failure to obtain non-disclosure agreements from Orbital, the Authority, and its own employees betrays all other efforts to protect its information. (Doc. 177 at 24-26). We disagree. AFS employs myriad security protocols to keep its engineering drawings, price quotes, profit margins, and other information secret. (Doc. 169 ¶¶ 33-37). These measures include storing files on a dedicated server at AFS’s video-monitored headquarters. (Burkhardt Dep. 24:10-23). All engineering drawings include a proprietary stamp warning that the document is confidential and “may not be used disclosed or released, in whole or in part, for any purpose, outside the authorized recipient, without signed authorization, and must be returned upon request.” (Doc. 169 ¶ 34; Vaughn Dep. 103:18-104:5). Employees must use individualized usernames and passwords to access AFS’s electronic files on-site and two passwords to connect using a virtual private network. (Doc. 169 ¶¶ 33-36).

Orbital and Authority employees have controlled access to Hydraulic System documents, but only through a secure, password-protected repository managed by the Mid-Atlantic Regional Spaceport, an agent of the Authority. (Id. ¶ 37). Staff at

⁷ Courts may consult uniform law commentary in construing a statute if that commentary was available to the General Assembly prior to the law’s adoption. 1 PA. STAT. AND CONS. STAT. ANN. § 1939. The most recent revisions to the uniform law occurred in 1985. See UNIFORM TRADE SECRETS ACT § 1. Thus, the commentary to the uniform law was available to the General Assembly when it adopted PUTSA in 2004. See Act of February 19, 2004, No. 14, 2004 Pa. Laws 143 (codified at 12 PA. STAT. AND CONS. STAT. ANN. § 5301 *et seq.*).

the Authority does not distribute AFS's materials except on a "need to know" basis. (Id. ¶¶ 37-38; Reed/Nash Dep. 85:6-87:5, 88:3-89:25, 90:23-91:2, 92:3-95:15). Although Orbital considered itself to be the legal owner of the Hydraulic System drawings, (see Brainard Dep. 77:13-15), it maintained the same confidentiality practice as the Authority. (Edwards Dep. 90:16-91:12; see also Brainard Dep. 77:3-78:4 (indicating that Orbital would not disclose information without a non-disclosure agreement)). These protective measures constitute reasonable efforts to preserve secrecy. See UNIFORM TRADE SECRETS ACT § 1, cmt. 10.

The fourth factor appraises the value AFS's proprietary information has to competitors. Bimbo Bakeries, 613 F.3d at 109. AFS describes the documents in question as "essential for anyone trying to understand the [Hydraulic System]" and "invaluable to anyone bidding on upgrades to the cylinder assemblies and gimbals." (Doc. 169 ¶ 183). The Livingston defendants counter that most of the documents Huber shared with their team "provided no benefit at all to [Livingston]." (Doc. 178 ¶ 113). The evidence paints a contrary picture. The Livingston defendants' gripper arms schematic indisputably borrowed multiple segments of AFS's drawing. (See Doc. 169 ¶¶ 224-25). And Aufiero admits that Livingston engineers consulted AFS's files when preparing Livingston's bid for the cylinder contract. (See Doc. 158-1, Aufiero Dep. 120:5-17, Feb. 12, 2016 ("Aufiero Dep.") 139:6-141:15). That AFS's engineering documents held value to AFS's competitors is incontrovertible.

The fifth factor is not in dispute. See Bimbo Bakeries, 613 F.3d at 109. Defendants do not contest the amount of time and capital that AFS invested in developing the Hydraulic System. AFS engineers labored for thousands of hours

on its engineering drawings alone. (Doc. 169 ¶ 183). This expense does not include time and financial resources AFS devoted to both assembly and installation of the system. (See id.) These costs weigh in favor of trade secret designation.

Lastly, we consider the relative difficulty of replicating AFS's design. See Bimbo Bakeries, 613 F.3d at 109. Pennsylvania law excludes from the definition of "trade secret" information that is "readily ascertainable by proper means." 12 PA. STAT. AND CONS. STAT. ANN. § 5302. The phrase "proper means" includes reverse engineering, defined as "starting with the known product and working backward to find the method by which it was developed." UNIFORM TRADE SECRETS ACT § 1, cmt. Pennsylvania law denies trade secret status to information susceptible to reverse engineering, whether or not "the alleged misappropriators in fact went through such an exercise" Synthes, Inc. v. Emerge Med., Inc., 25 F. Supp. 3d 617, 707-08 (E.D. Pa. 2014) (citations omitted).

Defendants contend that the Hydraulic System is vulnerable to reverse engineering. (See Doc. 203 at 20; Doc. 204 at 22; Doc. 206 at 21). The Livingston defendants in particular insist that their staff could reverse engineer the system's cylinders in two months and duplicate AFS's weld maps and code in five or six months. (Doc. 178 ¶¶ 171-74). The record firmly establishes that recreating the system so quickly would require infinite resources. The engineer who testified that he could replicate the system in two months' time did so under the express caveat that, in the hypothetical, both budget and manpower were "not an issue." (Doc. 169 ¶ 205). The sheer volume of resources required to reverse engineer the system

refutes defendants' assertion that AFS's trade secrets are "readily ascertainable" using proper means. 12 PA. STAT. AND CONS. STAT. ANN. § 5302.

The Rule 56 record weighs heavily in favor of classifying AFS's proprietary information as trade secrets. The undisputed evidence establishes that AFS used reasonable efforts to keep its information secret and that it shared its engineering files only as absolutely necessary. There is likewise no dispute that AFS expended copious resources developing the system, and that materials generated during that process held immense value to both AFS and its competitors. Until Huber shared AFS's drawings with the Livingston team, only a handful of its business partners—Orbital, the Authority, and their subcontractors—had means of understanding the Hydraulic System. The fact that AFS employees are not bound by confidentiality agreements does not upset the weighted balance of this analysis. Every other factor resolves in AFS's favor. AFS's proprietary materials are properly classified as trade secrets.

3. *Trade Secret Misappropriation*

AFS asserts that Huber, Integrated Systems, and the Livingston defendants are each liable for misappropriation of trade secrets. (Doc. 163 at 28). Pennsylvania law defines several variants of misappropriation, as follows:

- (1) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or
- (2) disclosure or use of a trade secret of another without express or implied consent by a person who:

- (i) used improper means to acquire knowledge of the trade secret;
- (ii) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was:
 - (A) derived from or through a person who had utilized improper means to acquire it;
 - (B) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or
 - (C) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or
- (iii) before a material change of his position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

12 PA. STAT. AND CONS. STAT. ANN. § 5302. “Improper means” include, but are not limited to, “theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy or espionage through electronic or other means.” Id.

a. Misappropriation by Huber

The Rule 56 record is irrefragable as pertains Huber’s misappropriative conduct. In the year preceding his resignation, Huber disclosed much of AFS’s proprietary information to Livingston. Beginning in November 2011, he shared videos and photos depicting Hydraulic System testing, as well as AFS’s pricing information, top-level engineering drawings, hydraulic schematics, and lists of spare system parts. (See Doc. 169 ¶¶ 43-44, 63-64, 85-91). Huber does not deny that, on the night before he resigned, he downloaded a massive quantity of data—97.66 gigabytes—from AFS’s servers and onto his laptop and personal hard drive. (Id.

¶¶ 183-85; Huber Dep. 265:1-266:10). Nor does he dispute that he transmitted these files to several Livingston engineers using his Dropbox and email accounts. (Doc. 169 ¶¶ 194-227; Doc. 205 ¶¶ 194-227). The transferred information included valuable proprietary drawings and schematics, pricing and financial information, and competitive bid documentation from AFS's prior contracts. (See Doc. 169 ¶¶ 184-85, 212, 226-27). Livingston relied on this information in its gripper arms design, and Huber cited several of AFS's engineering materials in drafting his own company's cylinder upgrade bid. (Id. ¶¶ 224-25, 243, 253).⁸

There is no genuine dispute that Huber misappropriated AFS's trade secrets. Huber clandestinely downloaded hundreds of thousands of proprietary files from AFS's password-protected servers on the eve of his resignation. (Id. ¶ 183). He knew that these documents were valuable trade secrets, yet he knowingly shared them with competitors to secure a bidding advantage *against* his then-current employer. (See id. ¶ 194). Huber's methods of obtaining, disclosing, and using AFS's trade secrets were clearly improper. See 12 PA. STAT. AND CONS. STAT. ANN. § 5302. The court will grant summary judgment to AFS on its misappropriation claim against Huber.

⁸ Huber's only objection to this evidence is that AFS did not "own" the information at issue at the time he disclosed it to Livingston, an argument rejected *supra*. He also cursorily remonstrates that the report of Chad Burkhardt, AFS's lead information technology employee, is not based on personal knowledge. (See, e.g., Doc. 205 ¶¶ 183, 184, 191-92, 204, 207, 209, 211, 220). We disagree. Burkhardt's analysis derives from his investigation and comparison of documents on AFS's servers with those recovered on Huber's personal hard drive. (Doc. 158-15 at 3). Assuming inadmissibility of Burkhardt's report *arguendo*, Huber's personal admissions independently support the misappropriation claim against him.

b. Misappropriation by Integrated Systems

AFS asserts that Integrated Systems, with Huber at its helm, is likewise liable for misappropriation. (Doc. 163 at 28). AFS argues that Integrated Systems used AFS's trade secrets without permission and knew that the secrets "derived from or through a person who had utilized improper means to acquire [them]." 12 PA. STAT. AND CONS. STAT. ANN. § 5302. Integrated Systems counters that it cannot be liable for misappropriation occurring before its incorporation date of October 18, 2012. (See Doc. 173 at 30). Integrated Systems denies that it was involved, officially, in the most egregious of Huber's actions, the bulk of which predated its formal existence. (See id.; see also Doc. 230).

A corporation is liable for acts preceding formal incorporation if it later ratifies those activities. Fishkin v. Susquehanna Partners, G.P., 563 F. Supp. 2d 547, 588 (E.D. Pa. 2008), aff'd, 340 F. App'x 110 (3d Cir. 2009). Ratification need not be explicit: it can be established by "passive acquiescence" of directors who had "full knowledge of the facts." Id. (quoting Blackwood Coal Co. v. Deister Concentrator Co., Inc., 626 F. Supp. 727, 729 (E.D. Pa. 1985)); see also Synthes, 25 F. Supp. 3d at 675-76. Huber served as Integrated Systems' sole director after incorporation and clearly ratified its pre-incorporation activities. The record is devoid of proof that Integrated Systems ever repudiated its ill-gotten contract with Orbital. *Per contra*, Integrated Systems doubled down on the unauthorized use of AFS's trade secrets by relying on and citing to AFS's engineering drawings in its subsequent bids for the cylinder contract. (See Doc. 169 ¶¶ 243, 253).

The Rule 56 record establishes that Integrated Systems knowingly used AFS's trade secrets for its own benefit. (Id.) There is no genuine dispute that Huber, as Integrated Systems' sole director at the time of the misappropriation, knew that he obtained these secrets using improper means. See 12 PA. STAT. AND CONS. STAT. ANN. § 5302. The court will grant summary judgment to AFS on its misappropriation claim against Integrated Systems.

c. Misappropriation by the Livingston Defendants

The record as pertains the Livingston defendants is more opaque. AFS adjures that the Livingston defendants knowingly relied on misappropriated trade secrets in their bids for Orbital's gripper arms and cylinder contracts. (Doc. 163 at 33-34). The Livingston defendants rejoin that they could not have known under the circumstances that AFS retained a proprietary interest in the Hydraulic System materials. (Doc. 177 at 12-13). This claim accordingly rises and falls on what the Livingston defendants knew—and when they knew it.

In support of its motion, AFS cites email exchanges between the Livingston defendants and Huber as well as contents of the Dropbox folder Huber shared with several Livingston employees. AFS argues that this evidence establishes that the Livingston defendants accepted documents from Huber despite observing its name and proprietary stamp thereon. (See, e.g., Doc. 169 ¶¶ 214-15, 277). AFS highlights that Aufiero and Vann knew Huber was employed by AFS when he supplied them with its confidential documents. (Id. ¶¶ 48-50). AFS asks the court to conclude from this record that the Livingston defendants knew or should have known that Huber obtained AFS's trade secrets by improper means. (Doc. 163 at 33-34; Doc. 191 at 21).

The Livingston defendants present a starkly divergent narrative. They explain that Orbital and Huber devised the plan to approach Livingston for the Hydraulic System upgrades. (Doc. 177 at 13; Doc. 178 ¶ 44). As defendants tell it, Livingston “had little choice but to work with Huber” given his relationship with Orbital. (See Doc. 177 at 13). The Livingston defendants concede that they met with Huber and Orbital several times while Huber was still employed at AFS. (Id. at 10-13). But they assert that Orbital’s representatives left the impression that Orbital and not AFS owned the trade secrets at issue. (See Doc. 178 ¶¶ 128-41). According to Livingston, Orbital employees insisted that they could “force AFS” to release its cylinder manufacturer to work with Livingston instead. (Id. ¶ 137). The Livingston defendants contend that, under these circumstances, they could not know that Huber misappropriated trade secrets. (Doc. 177 at 14-15).

When reviewing cross-motions for summary judgment, the court is bound to view the evidence in the light most favorable to the non-moving party with respect to each motion. FED. R. CIV. P. 56; Lawrence, 527 F.3d at 310 (quoting Rains, 402 F.2d at 245). The Livingston defendants and AFS present competing accounts, both of which find support in the *probata*. The record viewed in the light most favorable to the Livingston defendants indicates that they could have reasonably believed Orbital owned exclusive rights to the Hydraulic System information. Through a lens deferential to AFS, a trier of fact could infer that the Livingston team knew

they had obtained proprietary material *sub rosa*. These disputes of material fact preclude summary judgment in either party's favor.⁹

4. Exemplary Damages

AFS also moves the court for summary judgment on its claim for exemplary damages. Pennsylvania law authorizes courts to award such damages when the plaintiff establishes "willful and malicious misappropriation." 12 PA. STAT. AND CONS. STAT. ANN. § 5304(b). Courts may award exemplary damages in an amount up to two times the monetary damages awarded. *Id.* AFS acknowledges that it has not yet proven monetary damages, but suggests that the record permits a finding that it is entitled as a matter of law to exemplary damages. We disagree. Although the record is pellucid that Huber and Integrated Systems engaged in flagrant, textbook misappropriation, we will deny AFS's motion as premature to allow the development of a trial record necessary to assess the propriety of an award of exemplary damages.

B. The Common Law Fiduciary Duty Claims

AFS claims that Huber breached his fiduciary duty of loyalty and that Integrated Systems and the Livingston defendants aided and abetted that breach.

⁹ The Livingston defendants also assert that AFS has failed to demonstrate causation. They maintain that AFS never would have received Orbital's upgrade contracts because of a poor performance record. (Doc. 177 at 32-34, 37-39). They further assert that AFS cannot demonstrate causation with respect to the cylinder contract because AFS never bid on that contract and Livingston ultimately did not receive it. (*Id.* at 34-37). These considerations are irrelevant to the trade secret claim. PUTSA provides without caveat that "a complainant is entitled to recover damages for misappropriation." 12 PA. STAT. AND CONS. STAT. ANN. § 5304(a). To the extent causation is relevant to any ultimate damages inquiry, *see id.* § 5304(a), the court will consider the argument at trial.

The court will address the parties' respective arguments appertaining these claims *seriatim*.

1. Statutory Preemption

Pennsylvania's trade secret statute contains a preemption clause which expressly displaces tort, restitutionary, and other civil remedies for trade secret misappropriation. 12 PA. STAT. AND CONS. STAT. ANN. § 5308(a). The preemption clause exempts from its scope contractual remedies, criminal remedies, and "other civil remedies . . . not based upon misappropriation of a trade secret." *Id.* § 5308(b). With respect to claims for breach of fiduciary duty, preemption applies only to the extent the claims are based on the same conduct constituting misappropriation. See Youtie v. Macy's Retail Holding, Inc., 653 F. Supp. 2d 612, 620 (E.D. Pa. 2009) (citations omitted); see also Advanced Fluid Sys., 28 F. Supp. 3d at 324.

Courts consider two factors before applying preemption: (1) whether the tort claim involves anything other than trade secrets, and (2) whether the information allegedly misappropriated is properly classified as a trade secret. See Cunningham Lindsey U.S., Inc. v. Bonnani, No. 13-2528, 2014 WL 1612632, at *3 (M.D. Pa. Apr. 22, 2014) (Conner, C.J.) (citing Youtie, 653 F. Supp. 2d at 620). The court has already concluded that the materials in dispute are properly designated as trade secrets. Our sole inquiry is whether AFS's tort claims contemplate actions exceeding misappropriation.

Several instances of Huber's conduct undoubtedly fall outside the ambit of the trade secret statute. The evidence establishes that Huber organized manifold phone calls and meetings with the Livingston team and Orbital engineers; used

AFS-issued credentials to tour the Wallops Island facility and the Hydraulic System assembly with a known competitor; and intentionally diverted valuable contracts to competitors for personal benefit. (Doc. 169 ¶¶ 52, 71-74, 95-97; see also id. ¶¶ 132-35, 170-71). For their part, the Livingston defendants are alleged to have collaborated willingly with the employee of a known competitor to divest that competitor of the valuable Orbital contracts. (Id. ¶¶ 48-50, 52, 71-74, 132). Livingston also arranged a compensation scheme with Huber before he resigned from AFS. (Id. ¶¶ 106-07).¹⁰

This evidence readily surmounts the statutory preemption clause. AFS's fiduciary duty claims concern Huber's betrayal of AFS's trust, his disloyal and self-interested behavior, and the Livingston defendants' purported complicity in that breach. This is conduct far and apart from AFS's misappropriation claim. We will not apply statutory preemption to the fiduciary duty claims.

¹⁰ Huber asseverates that he never established a compensation agreement with Livingston. This argument relies exclusively on Huber's personal declaration. The declaration, dated the same day as Huber's opposition brief and months after his deposition, flatly contradicts his sworn testimony. In the declaration, Huber denies ever receiving an email from Livingston outlining specific compensation terms. (Doc. 198-2 ¶ 26). But during his deposition, Huber examined the email in question, indicating that it "jogged [his] memory" with respect to the "payment terms that [Livingston] offered [him.]" (Huber Dep. 359:17-360:22; see also Doc. 168-5). And in his Rule 56.1 responsive statement of facts, Huber admits that Livingston's gripper arms proposal "included money to pay Huber." (Doc. 169 ¶ 130; Doc. 205 ¶ 130). The court concludes that Huber's declaration *a contrario* falls within the Third Circuit's definition of "sham affidavit." That is, the declaration is nothing more than a contradictory statement which "indicates only that the affiant cannot maintain a consistent story or is willing to offer a statement solely for purposes of defeating summary judgment." Jimenez v. All Am. Rathskeller, Inc., 503 F.3d 247, 253 (3d Cir. 2007). Courts cannot accord sham affidavits evidentiary weight. Id. Hence, we disregard Huber's declaration in our Rule 56 determination.

2. ***Huber's Breach of the Duty of Loyalty***

Under Pennsylvania law, employees owe a duty of loyalty to their employer. Synthes, 25 F. Supp. 3d at 667 (citation omitted). This duty obliges employees to refrain from competing with their employer or assisting its competitors and from using protected information to a competitor's advantage. Id. (citing RESTATEMENT (THIRD) OF AGENCY §§ 8.04-.05 (AM. LAW INST. 2006)). To sustain its claim for breach of this duty, AFS must establish that: (1) Huber failed to act in good faith and for AFS's sole benefit in the course of his employment; (2) AFS suffered injury; and (3) Huber's failure to act solely for AFS's benefit was "a real factor in bring[ing] about" that injury. Synthes, 25 F. Supp. 3d at 667 (alteration in original) (quoting McDermott v. Party City Corp., 11 F. Supp. 2d 612, 626 n.18 (E.D. Pa. 1998)).

In view of the evidence detailed *passim*, it is beyond peradventure that AFS satisfies the first element. Huber acted for the benefit of entities other than his employer for nearly a year before his resignation.¹¹ He assisted Livingston in drafting bids to compete with AFS, and deliberately withheld Orbital's request for a new cylinder quote from his employer. (See, e.g., Doc. 169 ¶¶ 49, 118, 120, 155, 159, 163-64, 168, 170). Perhaps most egregiously, Huber intentionally thwarted AFS's efforts to secure Orbital's gripper arms contract. He inflated the quote authorized by his employer by \$173,446, while simultaneously ensuring success of Livingston's competing bid—which included \$41,322.15 in compensation for Huber. (Id. ¶¶ 122-

¹¹ Huber insists that his actions were well-intentioned, aimed to protect Orbital's mission success and ensure resupply of the International Space Station. (See Doc. 204 at 11). Purported altruism aside, Huber's argument concedes that he deliberately pursued the interests of entities other than AFS.

24, 132). These actions plainly evince Huber’s failure to act “in good faith and solely for the benefit” of AFS. See Synthes, 25 F. Supp. 3d at 667.¹²

Concerning the second element, Huber cursorily asserts that AFS did not suffer injury. (See Doc. 204 at 11). On this record, we must again disagree. AFS lost valuable opportunities to competitors assisted by Huber. Huber introduced himself to Vann to help Livingston “become involved with the Orbital Sciences account.” (Doc. 169 ¶ 49). He intentionally endeavored to help Orbital “phase out AFS” and “incorporate another company . . . like Livingston.” (Id. ¶ 80). At one point, Huber described his mission as helping Livingston to “tak[e] over” AFS’s contract. (Id. ¶ 102). And he succeeded: Huber’s efforts facilitated Livingston’s acquisition of the gripper arms contract and diverted the cylinder upgrade contract to Integrated Systems. A more compelling example of commercial injury is difficult to conjure.

The paramount issue is whether Huber was a “real factor” in causing that injury. Huber claims that AFS lost interest in the Orbital account and failed to provide services at the caliber Orbital demanded. (Doc. 204 at 9-11). The record provides support for this assertion. (See, e.g., Doc. 172-29, Fava Dep. 17:5-32:6,

¹² Huber correctly observes that at-will employees may make limited preparations for post-resignation competition against their former employers during the course of their employment. Synthes, 25 F. Supp. 3d at 667 (quoting Oestrich v. Environ. Inks & Coatings Corp., No. 89-8907, 1990 WL 210599, at *6 (E.D. Pa. Dec. 17, 1990)). The law permits preparatory activities such as developing business plans and meeting with prospective investors. See, e.g., id. at 668-69. But it prohibits employees from soliciting customers for their rival business or *actually competing* during their employment. See id. at 667-68 (citations omitted). Huber did both. Accordingly, we reject his attempt to recast his disloyal conduct as permissible preparation for post-separation employment.

Mar. 22, 2016). AFS's performance was marked by missed deadlines, maladroitness, construction, and noncompliance with commonly accepted engineering standards. (See id.) Complications lingered following installation of the Hydraulic System, culminating with an aborted launch caused in part by mechanical issues. (See id. at 29:20-30:21). Fava consistently cited these deficiencies—together with AFS's inflated price—as the basis for Orbital's decision to award the gripper arms contract to Livingston. (See, e.g., Doc. 169 ¶ 249; see also Doc. 178 ¶ 80).

In defense of its work, AFS cites testimony evincing that both Orbital and the Authority were generally satisfied with AFS's services, albeit after it remedied the inceptive mechanical issues. (Doc. 169 ¶¶ 23-27, 32). AFS infers from this evidence that Huber singularly deprived it of the gripper arms contract, and the evidence supports its inference. Fava's notes from September of 2012 indicate that Orbital's decision "will likely come down to price, with a *slight nudge toward AFS* due to their experience with the current system." (Id. ¶ 133 (emphasis added)). One week later, after Huber submitted an inflated price on AFS's behalf, Orbital eliminated AFS and awarded the gripper arms contract to Livingston. (Id. ¶¶ 123, 133-36). The record also suggests that Huber purposely foiled AFS's attempts to secure quote requests and ultimately bid on the cylinder upgrade contract. (See id. ¶¶ 155, 159, 163, 170-71). Certainly, AFS has adduced ample evidence from which a reasonable finder of fact could resolve that Huber's actions were a "real factor" in its failure to obtain two valuable contracts.

On AFS's motion, however, the court must construe the Rule 56 record in the light most favorable to Huber. Viewed through this lens, we cannot conclude as a

matter of law that AFS is entitled to judgment on its claim. The evidence permits a finding that Orbital had myriad reservations about hiring AFS based on deficient past performance. Although a neutral observer may view this record to be a stronger argument for one side, we will not weigh disputed evidence. Thus, the issue of whether Huber's conduct was a "real factor" animating AFS's injury is a question for trial.

3. *Aiding and Abetting Huber's Breach*

The Livingston defendants assert that Pennsylvania law does not contemplate aiding and abetting breach of a fiduciary duty as a freestanding tort claim. (Doc. 177 at 26-28). The Pennsylvania Supreme Court has not explicitly addressed this issue. In its only decision on the subject, the court observed only that the case before it did not require assessment of "the underlying viability of such a claim under Pennsylvania law." Official Comm. of Unsecured Creditors v. PriceWaterhouseCoopers, LLP, 989 A.2d 313, 327 n.14 (Pa. 2010). It noted, however, that the Pennsylvania Commonwealth Court had recognized such a claim in Koken v. Steinberg, 825 A.2d 723, 732 (Pa. Commw. Ct. 2003), and that Koken reflects the current state of Pennsylvania law "as established by the . . . highest appellate court" to have considered the issue. PriceWaterhouseCoopers, LLP, 989 A.2d at 327 n.14. Federal courts applying Pennsylvania law regularly allow plaintiffs to pursue such claims. See, e.g., Synthes, 25 F. Supp. 3d at 674-75 (citation omitted); Reis v. Barley, Snyder, Senft & Cohen, 667 F. Supp. 2d 471, 492 (E.D. Pa. 2009) (citing Koken, 825

A.2d 723), aff'd, 426 F. App'x 79, 84 (3d Cir. 2011).¹³ We join this consensus and conclude that Pennsylvania law recognizes an independent cause of action for aiding and abetting breach of a fiduciary duty.

To prevail on a claim for aiding and abetting a fiduciary's breach, a plaintiff must show (1) breach of a fiduciary duty owed to another; (2) knowledge of that breach by the aider and abettor; and (3) "substantial assistance or encouragement" by the aider and abettor in effecting the breach. Synthes, 25 F. Supp. 3d at 674-75 (quoting Reis, 667 F. Supp. 2d at 492). In other words, the party alleged to have aided and abetted a fiduciary's breach must have known that the agent's activities constituted a breach of fiduciary duty and nevertheless assisted or encouraged that breach. See id. at 675 (quoting Bd. of Trs. of Teamsters Local 862 Pension Fund v. Foodtown, Inc., 296 F.3d 164, 174 (3d Cir. 2002)); Bair v. Purcell, 500 F. Supp. 2d 468, 496 (M.D. Pa. 2007) (same). Because we have already held that genuine issues of fact preclude a finding that Huber breached his fiduciary duty to AFS, we must deny AFS's motion on its corollary claims against Integrated Systems and the Livingston defendants for aiding and abetting that breach. Our analysis *infra* considers only the cross-motions for defensive summary judgment.

¹³ The only contrary authority cited by the Livingston defendants is a state trial court decision which predates the Supreme Court's PriceWaterhouseCoopers decision and misconstrues the Commonwealth Court's decision in Koken. See Fibonacci Group, Inc. v. Finkelstein & Partners, LLP, No. 1399, 2007 WL 702192, at *7 n.9 (Pa. Ct. Com. Pl. Jan. 31, 2007) (stating in error that Koken "held that the tort of aiding and abetting a breach of fiduciary was *not* recognized under Pennsylvania law" (emphasis added)).

a. AFS's Claim Against Integrated Systems

Integrated Systems maintains that it was merely the passive beneficiary of Huber's personal breach of the duty of loyalty and cannot be separately liable for aiding and abetting that breach.¹⁴ (See Doc. 206 at 11). On this issue, the decision in Synthes v. Emerge Medical, Inc., 25 F. Supp. 3d 617 (E.D. Pa. 2014), is instructive.

In Synthes, the district court contemplated whether and when a corporate entity may be liable for aiding and abetting its director's breach of a fiduciary duty. Id. at 676-77. Several defendants in Synthes established a corporation to compete directly with their former employer. See generally id. at 630-66. The court carefully considered whether the new corporation could be liable for aiding and abetting when its only offense was "passive receipt" of benefits reaped from its directors' misconduct. Id. at 676-78. The court concluded that corporations cannot be liable under an aiding and abetting theory in such circumstances. Id. at 677-78. To hold otherwise, the court observed, would defy the established principle that "a defendant cannot both 'breach' and 'aid/abet' a breach in the same instance." Id. (quoting In re Jamuna Real Estate, LLC, 416 B.R. 412, 437 (Bankr. E.D. Pa. 2009)).

AFS's claim against Integrated Systems suffers the same fate. Even viewed in a light most favorable to AFS, the record establishes no tortious conduct on the

¹⁴ Integrated Systems again asserts that it cannot be held liable for acts that occurred before its incorporation on October 18, 2012. (Doc. 206 at 10-11). We reject this argument for the reasons articulated *supra*. See Fishkin, 563 F. Supp. 2d at 588 (citations omitted). Integrated Systems also argues that AFS failed to plead this count against it with sufficient particularity. (See Doc. 206 at 9). The second amended complaint asserts Count 10 against "all defendants except Huber." (Doc. 70 at 39). The subsequent paragraphs do not mention Integrated Systems by name, but the conduct described therein plainly reflects AFS's intent to bring this claim against Integrated Systems.

part of Integrated Systems. At best, Integrated Systems passively acquiesced in Huber's conduct. But the law requires more, and AFS adduces no proof tending to show that Integrated Systems actively encouraged, funded, or otherwise assisted Huber's activities. See id. The record instead suggests that Integrated Systems was a mere pawn in Huber's duplicity. Integrated Systems benefited from, but did not participate in, Huber's conduct. The court will grant summary judgment to Integrated Systems on the aiding and abetting claim.

b. AFS's Claims Against the Livingston Defendants

AFS asserts an identical aiding and abetting claim against the Livingston defendants. AFS maintains that the Livingston defendants knew of Huber's breach and substantially assisted and encouraged same. (Doc. 223 at 5-6). The Livingston defendants answer that they were unaware of Huber's breach and, alternatively, that genuine issues of fact remain as to what the Livingston defendants knew and whether they substantially assisted and encouraged any breach. (Doc. 177 at 29-32).

The extant factual disputes concerning this claim are many and material. AFS produces ample evidence tending to establish that Livingston knowingly encouraged and facilitated Huber's breach of his fiduciary duty to AFS. (See, e.g., Doc. 169 ¶¶ 47-49, 51-57, 70-72, 82-83, 95-98, 104, 131). The Livingston defendants substantiate a competing narrative suggesting that they had no knowledge of Huber's perfidious intent and were under the mistaken impression that Orbital owned exclusive proprietary rights to the Hydraulic System. (Doc. 178 ¶¶ 70-71, 128-29, 137; see also Aufiero Dep. 93:12-18, 117:13-120:24). Genuine issues of

material fact obviously persist with respect to this claim. Whether and to what extent the Livingston defendants aided and abetted Huber will be determined at trial.¹⁵ The court will deny the Livingston defendants' motion for summary judgment as to this claim.

IV. Conclusion

The court will grant in part and deny in part AFS's motion (Doc. 156) for summary judgment and Integrated Systems' motion (Doc. 171) for summary judgment as stated herein. The court will also grant AFS's unopposed motion (Doc. 159) for summary judgment on Integrated Systems' counterclaims. The motions (Docs. 156, 171, 175) for summary judgment will otherwise be denied. The court will issue a separate order memorializing the findings set forth herein and scheduling this matter for a bench trial on the remaining claims and the issue of damages.

/S/ CHRISTOPHER C. CONNER
Christopher C. Conner, Chief Judge
United States District Court
Middle District of Pennsylvania

Dated: June 6, 2017

¹⁵ The court acknowledges the Livingston defendant's assertion that, at minimum, they cannot be liable for Huber's conduct with respect to the cylinder upgrade because Livingston did not receive that contract. (Doc. 177 at 34-37). The *probata* as pertains the gripper arms and cylinder contracts (and Huber's conduct anent both) is inextricably entwined. We decline to parse AFS's claims by contract at this juncture.